UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 12/20/2010

NOTICE OF ALLOWANCE AND FEE(S) DUE

24350 7590 1220/2010 STITES & HARBISON, PLLC 400 W MARKET ST SUITE 1800

LOHISVILLE KY 40202-3352

EXAMINER				
DASGUPTA, SOUMYA				
ART UNIT	PAPER NUMBER			
2176	•			

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/562,987	12/29/2005	Karl Hehl	HE160-000HE	3525	

TITLE OF INVENTION: METHOD AND DEVICE FOR INTERACTIVE CONTROL OF A MACHINE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/21/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions.	ng the Patent, advance of nerwise in Block 1, by (rders and notification of r a) specifying a new corres	naintenance fees w pondence address;	ill be n and/or	nailed to the current (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
24350	7590 12/20	/2010	nave			_	
400 W MARKE SUITE 1800			I he Stat addi tran	Cert reby certify that thi es Postal Service w ressed to the Mail smitted to the USPI	ificate s Fec(s ith suff Stop I O (57I	of Mailing or Transi) Transmittal is being icient postage for firs SSUE FEE address) 273-2885, on the da	mission deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
LOUISVILLE, I	K Y 40202-3352						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTOR	RNEY DOCKET NO.	CONFIRMATION NO.
10/562,987	12/29/2005	'	Karl Hehl		Н	E160-000HE	3525
TITLE OF INVENTION	: METHOD AND DEVI	CE FOR INTERACTIVE	E CONTROL OF A MACE	HINE			
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	03/21/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]			
DASGUPTA	A, SOUMYA	2176	715-771000				
Change of corresponder CFR 1.363).	ence address or indicatio	n of "Fee Address" (37	2. For printing on the p				
	ondence address (or Cha B/122) attached.	nge of Correspondence	(I) the names of up to or agents OR, alternativ	3 registered patent vely,	attorno	eys I	
PTO/SB/47; Rev 03-0 Number is required.	ication (or "Fee Address)2 or more recent) attach	ed. Use of a Customer	2 registered patent atto listed, no name will be	rnevs or agents. If r	io name	is 3	
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or tyr	ne)			
PLEASE NOTE: Unl	less an assignee is ident	ified below, no assignee	data will appear on the p	atent. If an assigne	e is ide	entified below, the do	ocument has been filed for
(A) NAME OF ASSI		netion of this form is NO	(B) RESIDENCE: (CITY				
(1)111111111111111111111111111111111111	O. LL		(i) installation (ciri	and STITE OR C	001111	,	
Please check the appropr	iate assignee category or	categories (will not be po	rinted on the patent):	Individual 🚨 Co	rporatio	on or other private gro	oup entity 🚨 Government
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Plea	se first reapply an	y previ	iously paid issue fee	shown above)
Issue Fee			A check is enclosed.				
Publication Fee (N	vo small entity discount p	permitted)	Payment by credit car The Director is hereby				ficiency or credit any
Advance Order -	of Copies		overpayment, to Depo	sit Account Numbe	r	(enclose a	n extra copy of this form).
5. Change in Entity Sta	tus (from status indicate s SMALL ENTITY statu		☐ b. Applicant is no lon	1-ii CMAT	T ENTE	TTV 6 27 C	2D 1 27(=)(2)
interest as shown by the	records of the United Sta	tes Patent and Trademark	Office.				e assignee or other party in
Authorized Signature				Date			
Typed or printed nam	e		Registration N	D			
		FR 1.311. The information	on is required to obtain or r	-		c which is to file (and	by the USPTO to process)
an application. Confiden submitting the completes this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu 'irginia 22313-1450. DO 113-1450.	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the NOT SEND FEES OR	1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	imated to take 12 n idual case. Any co er, U.S. Patent and D THIS ADDRESS.	ninutes nments Fradem SEND	to complete, including on the amount of tire ark Office, U.S. Department of the ark Office, U.S. Department of the transfer of	by the USPTO to process) g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FILING DATE FIRST NAMED INVENTOR		CONFIRMATION NO.	
10/562,987 12/29/2005		Karl Hehl	HE160-000HE	3525	
24350 75	90 12/20/2010		EXAM	INER	
STITES & HARBISON, PLLC			DASGUPTA, SOUMYA		
400 W MARKET S	ST		ART UNIT	PAPER NUMBER	
SUITE 1800 LOUISVILLE, KY 40202-3352		2176 DATE MAIL ED: 12/20/201	n		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 831 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 831 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/562.987 HEHL, KARL Notice of Allowability Examiner Art Unit SOLIMYA DASGLIPTA 2176 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTQL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFB 1.313 and MPEP 1308. This communication is responsive to October 14, 2010. The allowed claim(s) is/are 1-25. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) Some* c) None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) Thereto or 2) to Paper No./Mail Date (b) I including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

Attachment(s)

∇	Notice o	f References	Citod	(PTO	.802

- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit
- of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413).
- Paper No./Mail Date 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🗌 Other _____.

/DOUG HUTTON/

Supervisory Patent Examiner, Art Unit 2176

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Terry Wright (Reg No. 57,992) on Dec 14, 2010.

Claims 1 and 15 are amended as follows:

1. (Currently Amended) A method for interactive control of a plastics material injection molding machine, where, via an input unit, which is provided with actuating fields, operating parameters necessary for an operating sequence of a machine are input, in a form which prompts an operator, into a data processing unit which stores these operating parameters, and subsequently one or more operating sequences are carried out in accordance with the stored operating parameters, the method comprising:

recording a data set covering basic rules of the operating sequence of the machine in the data processing unit and, by using the data set, providing the operator on a graphical user interface with visualization of a selected choice of input possibilities, based on a machine configuration and a machine environment, for additional parts of

Art Unit: 2176

the operating sequence that can be added in a compatible manner into existing parts of the operating sequence[[,]];

providing to an operator, for manual input and/or for input by means of a manipulator, on the graphical user interface a selected choice of actuating fields corresponding to the additional parts of the operating sequence and for navigation on a navigation surface statically arranged on the graphical user interface[[,]]:

wherein the navigation surface eemprising comprises at least three lines or three columns of actuating and input fields ie that are hierarchical from line to line or column to column and ie are represented in en the graphical user interface with a plurality of navigation levels associated with one another such that the operator is able to visualize a path through the at least three lines or three columns of actuating and input fields[[,]]; and

wherein, when the operator's input is made, even at a hierarchically higher level input possibilities possible input paths are visualized as a selected choice based on the operator's input.

15. (Currently Amended) An apparatus for interactive control of a plastics material injection molding machine, the apparatus comprising:

a display unit;

a data processing unit[[,]];

Application/Control Number: 10/562,987

Art Unit: 2176

an input unit with fields arranged on a graphical user interface for manual input and/or for input by means of a manipulator, by means of which fields, in a form which prompts an operator, operating parameters necessary for an operating sequence of the machine can be input into the data processing unit which stores the operating parameters for subsequently carrying out one or more operating sequences in accordance with the stored operating parameters, wherein the fields are actuating fields for navigation on a navigation surface statically arranged on the graphical user interface, and

a data set recorded in the data processing unit and covering basic rules of the operating sequence of the machine[[,]];

wherein the data set provides a selected choice of possible input possibilities for additional parts of the operating sequence, said possible input possibilities being offered to the operator, displayed on-surface the graphical user interface, and based on machine configuration and machine environment, such that the additional parts of the operating sequence can be added in a compatible manner into existing parts of the operating sequence[[,]];

wherein the navigation surface eemprising comprises at least three lines or three columns of actuating and input fields is that are hierarchical from line to line or column to column and is are represented in en the graphical user interface with a plurality of navigation levels associated with one another such that the

Art Unit: 2176

operator is able to visualize a path through the at least three lines or three columns of actuating and input fields[[,]]; and

wherein, when the operator's input is made, even at a hierarchically higher level input possibilities possible input paths are visualized as a selected choice based on the operator's input.

Allowable Subject Matter

Claims 1-25 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art fails to disclose every limitation of Claims 1, 15, and 25. More specifically, the prior art fails to disclose or suggest a method for interactive control of a plastics material injection molding machine, the method comprising:

- the navigation surface comprises at least three lines or three columns of
 actuating and input fields that are hierarchical from line to line or column to
 column and are represented in the graphical user interface with a plurality of
 navigation levels associated with one another such that the operator is able to
 visualize a path through the at least three lines or three columns of actuating and
 input fields:
- when the operator's input is made, even at a hierarchically higher level possible input paths are visualized as a selected choice based on the operator's input.

Art Unit: 2176

The examiner notes that these features of the present invention are illustrated in Figures 2-5 the Drawings and discussed in detail from Page 5, Line 19 through Page 8, Line 25 in the Specification of the present application.

Regarding Claim 15, the examiner interprets the recited "apparatus" to include the following hardware components:

· display unit;

as indicated in Figure 1 of the Drawings. The recited "input device" and its associated modules are controlled by, and displayed using, the hardware components of the system, as indicated in Figures 1 of the Drawings, and discussed in detail from Page 4, Line 7 through Page 5, Line 25. Accordingly, Claim 15 recites statutory subject matter, as defined in 35 U.S.C. 101.

Regarding Claim 25, the examiner interprets the recited "non-transitory computer readable medium" (see Line 1) to be a hardware component because one of ordinary skill in the art would interpret a non-transitory data carrier (see Page 8, Lines 22-23) as hardware memory storage device. The method of Claim1 that is stored on the "non-transitory computer readable medium" is operated on a machine environment. This can be further illustrated in Fig. 1 and incorporated in a "machine" which is discussed in detail from Page 4, Line 7 through Page 5, Line 25. Accordingly, Claim 26 recites statutory subject matter, as defined in 35 U.S.C. 101.

Claims 2-14:

These claims incorporate the allowable subject matter of Claim 1 and are thus allowable

Art Unit: 2176

Claims 16-24:

These claims incorporate the allowable subject matter of Claim 15 and are thus allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soumya Dasgupta whose telephone number is 571-272-7432. The examiner can normally be reached on M-Th 9am-7pm, F 9am-1pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2176

/Soumya Dasgupta/ Examiner, Art Unit 2176

/DOUG HUTTON/ Supervisory Patent Examiner, Art Unit 2176